



# **MICROSOFT WINDOWS & VEEAM BACKUP AND RECOVERY WITH SCALE COMPUTING HC3**

**QUICKSTART GUIDE**

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# INTRODUCTION

Veeam Backup and Replication is a fast, powerful, and flexible utility that provides reliable backup of virtualized applications and data. It allows organizations to achieve a less than 15 minute recovery time objective (RTO) and recovery point objective (RPO) on mission-critical applications and data. These same recovery marks can also be achieved in an HC3 system. With the addition of client agents, Veeam can be used to backup your HC3 server environment to a Veeam repository and do a file level or bare metal restore in the event of a disaster.

# REQUIREMENTS


- Veeam Backup Server
- Veeam Backup and Replication Console (installed on the Backup Server by default)
- Veeam Backup Repository(ies)
- A running and configured HC3 VM utilizing a supported version of Windows for the guest OS

Setup and configuration of the Veeam Backup Server, Veeam Backup and Replication Console, and Veeam Repository(ies) are not covered in this document. It is assumed for the purposes of this document that these items are already installed and configured in your environment. Contact Veeam if you need assistance with the installation or configuration process of any of the necessary items.

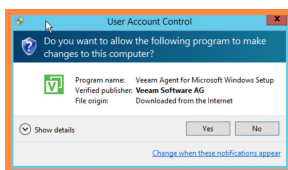
# VEEAM BACKUP CLIENT AGENT INSTALLATION

Before the HC3 VMs can be included in the Veeam backup environment the Veeam Client Backup Agent must be installed on the guest OS.

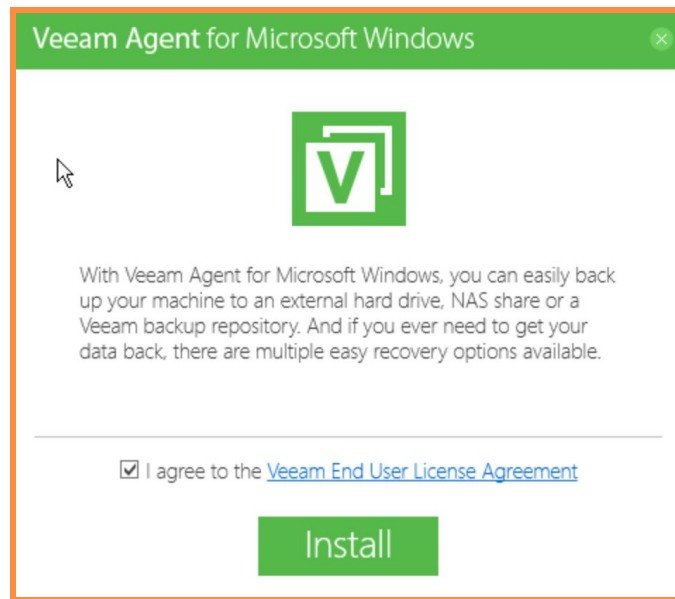
1. Log into Veeam's website with your credentials and download the applicable backup agent onto your HC3 VM. We will be using a Windows guest OS for the purpose of this guide, although a Linux client is available as well.
2. Extract the zip file and double-click the install executable to start.

Name	Date modified	Type	Size
 VeeamAgentWindows_2.0.0.700	10/3/2017 11:07 AM	Application	194,786 KB

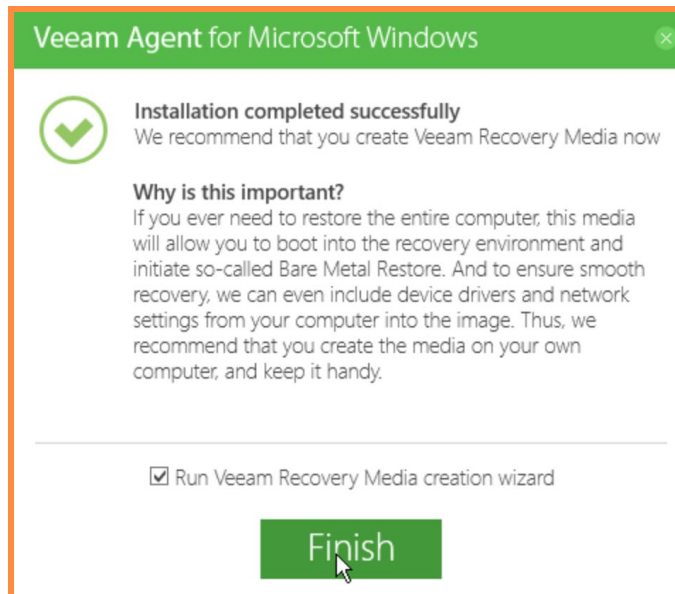
3. Click Yes.



4. Agree to the licensing terms and click Install.



5. Make sure that the Run Veeam Recovery Media creation wizard box is checked. The Veeam Recovery Media Image creation will be covered in the next section.



6. Click Finish.

## CREATE AND STORE A VEEAM RECOVERY MEDIA IMAGE

It is a recommended best practice to make a Veeam Recovery Media image of the VM once the Veeam backup agent is installed and before configuring any other Veeam backups. The Veeam Recovery Media image is an ISO

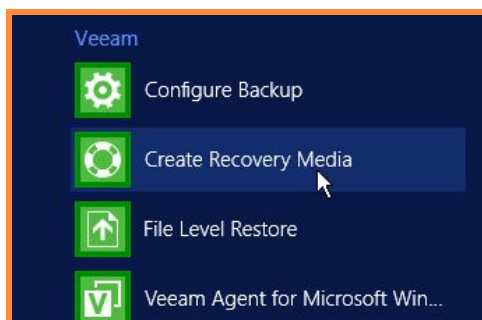
image of the HC3 VM that can be stored off site in order to keep a disaster recovery option available for the VM in the future.

The Veeam Recovery Media image can be made at the time of the agent installation as detailed in the section above or by going through the recovery media tool after the installation is complete.

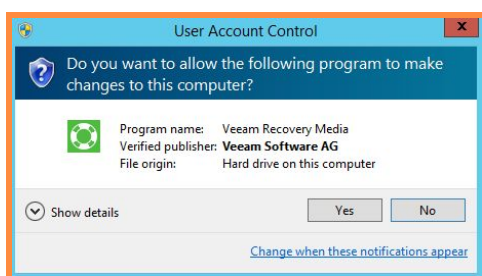
In either instance, be sure to store the Veeam Recovery Media image in a secure location off of the original server and ideally outside of the local HC3 environment completely for true disaster recovery protection.

## CREATE THE RECOVERY MEDIA

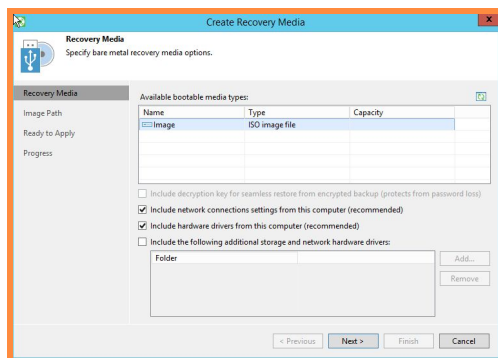
1. Either continue with the agent installation after checking the Run Veeam Recovery Media creation wizard from the previous section or log into your desired server and start the Create Recovery Media tool as shown below.



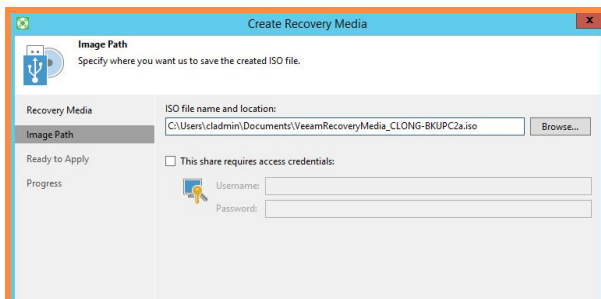
2. Click Yes to continue.



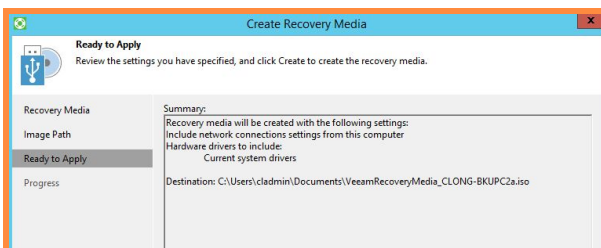
3. Select ISO Image File and click Next.



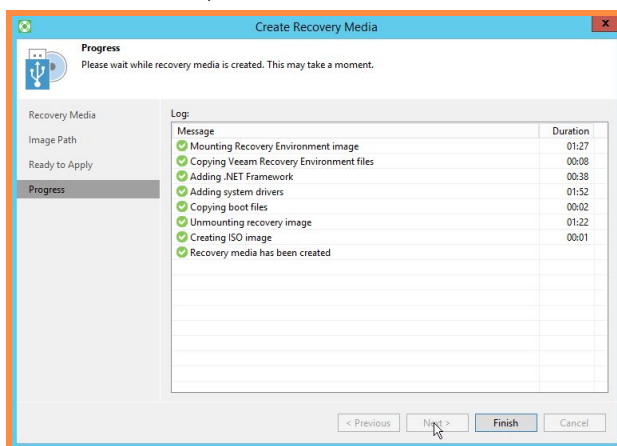
4. Specify a location and name for the file and click Next.



5. Verify your selections and click Create.



6. Click Finish once the image has been completed.



## CONFIGURE VEEAM BACKUP

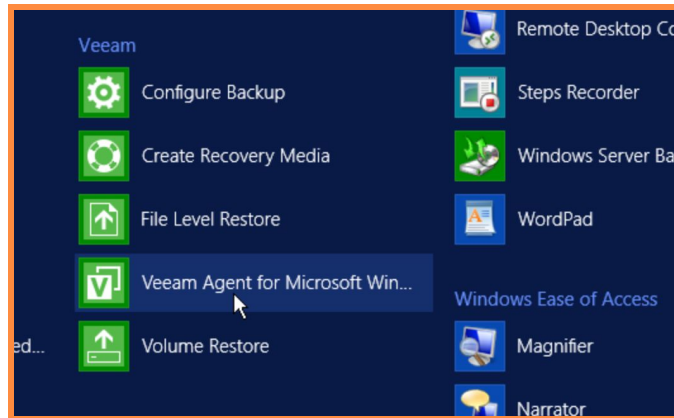
This document assumes you have an existing Veeam environment running within your current infrastructure; the existing Veeam environment will be utilized to backup the virtual machines on your HC3 system. The setup and configuration of the Veeam environment and components is outside the scope of this document. Contact Veeam if you need assistance with the installation or configuration process.

## PREPARE THE HC3 VM FOR VEEAM

Ensure the Veeam Backup Client Agent has been installed on the HC3 VM guest OS you wish to backup utilizing Veeam. See [Veeam Backup Client Agent Installation](#) above for installation steps if needed.

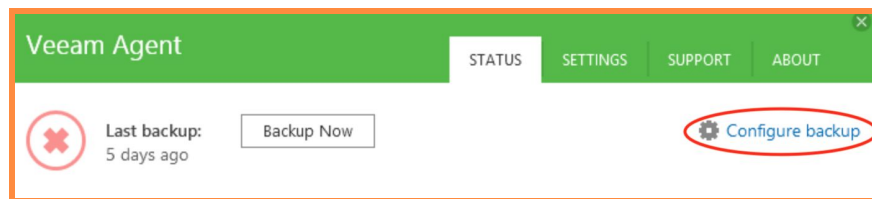
Decide if a Full Server, Volume, or File Level backup is required for the HC3 VM. This document will cover the Full Server and File Level backups in detail. Contact Veeam if you need any assistance with the Volume backup configuration.

Open the Veeam Agent For Microsoft Windows to begin.

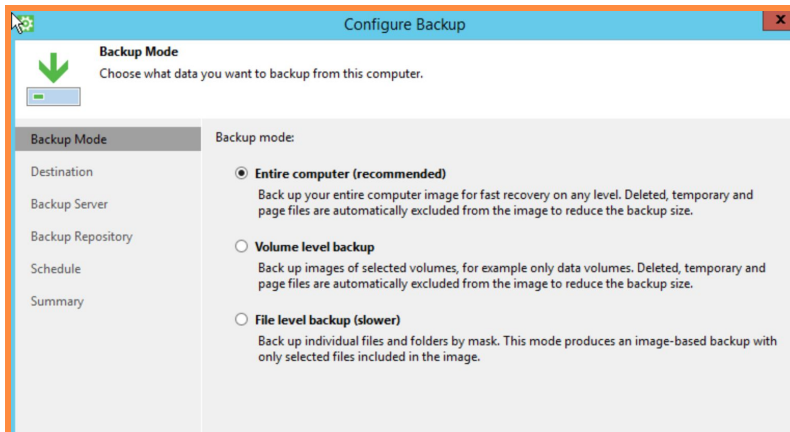


## FULL SERVER BACKUP CONFIGURATION

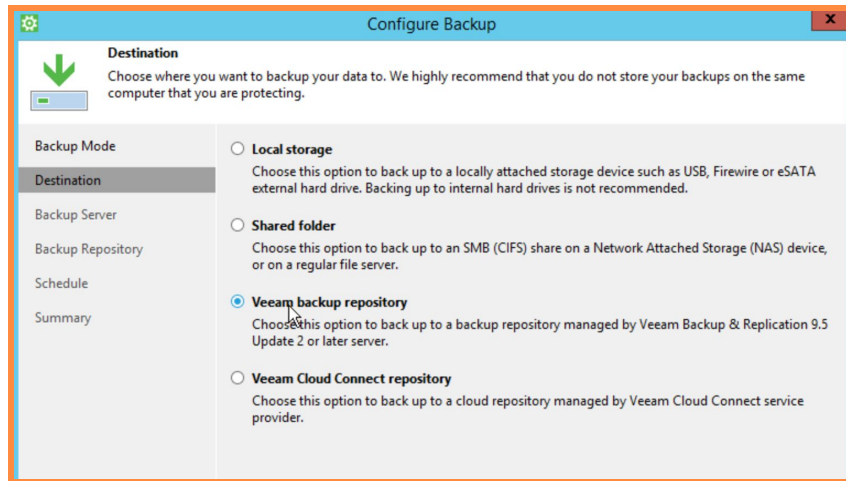
1. Click Configure backup.



2. Click Yes to allow Veeam to make changes.
3. Select Entire Computer and then click Next.



4. Select to use an existing Veeam Backup Repository for the target location. Click Next.



**Destination**  
Choose where you want to backup your data to. We highly recommend that you do not store your backups on the same computer that you are protecting.

**Backup Mode**

**Destination**

**Backup Server**

**Backup Repository**

**Schedule**

**Summary**

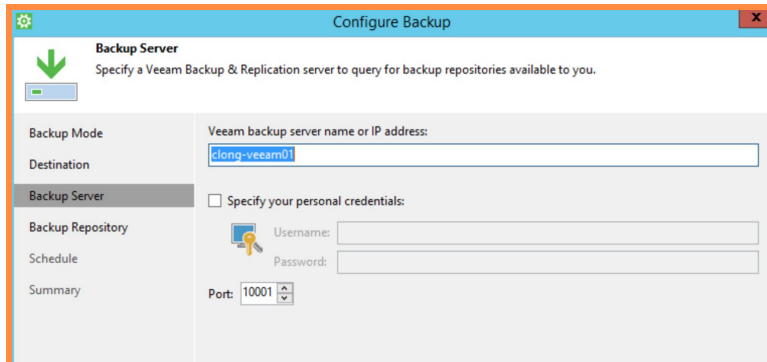
☐ **Local storage**  
Choose this option to back up to a locally attached storage device such as USB, Firewire or eSATA external hard drive. Backing up to internal hard drives is not recommended.

☐ **Shared folder**  
Choose this option to back up to an SMB (CIFS) share on a Network Attached Storage (NAS) device, or on a regular file server.

☒ **Veeam backup repository**  
Choose this option to back up to a backup repository managed by Veeam Backup & Replication 9.5 Update 2 or later server.

☐ **Veeam Cloud Connect repository**  
Choose this option to back up to a cloud repository managed by Veeam Cloud Connect service provider.

- Enter the name or IP address of your Veeam Backup Server and click Next.



**Backup Server**  
Specify a Veeam Backup & Replication server to query for backup repositories available to you.

**Backup Mode**

**Destination**

**Backup Server**

**Backup Repository**

**Schedule**

**Summary**

Veeam backup server name or IP address:

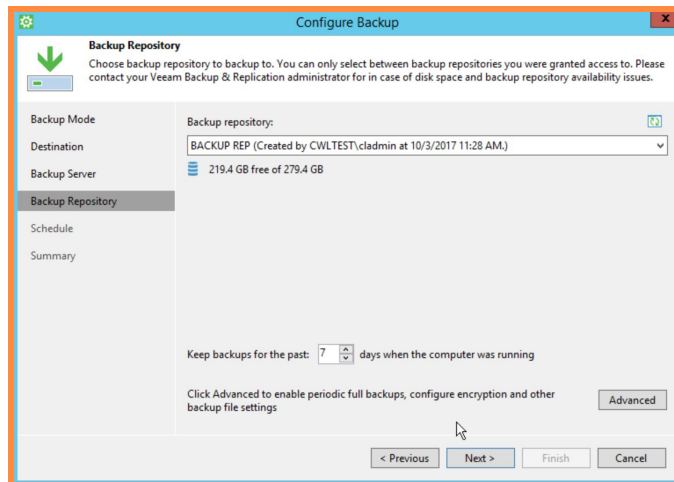
☐ Specify your personal credentials:

Username:

Password:

Port:

- Verify your Veeam Backup Repository and click Next.



**Backup Repository**  
Choose backup repository to backup to. You can only select between backup repositories you were granted access to. Please contact your Veeam Backup & Replication administrator for in case of disk space and backup repository availability issues.

**Backup Mode**

**Destination**

**Backup Server**

**Backup Repository**

**Schedule**

**Summary**

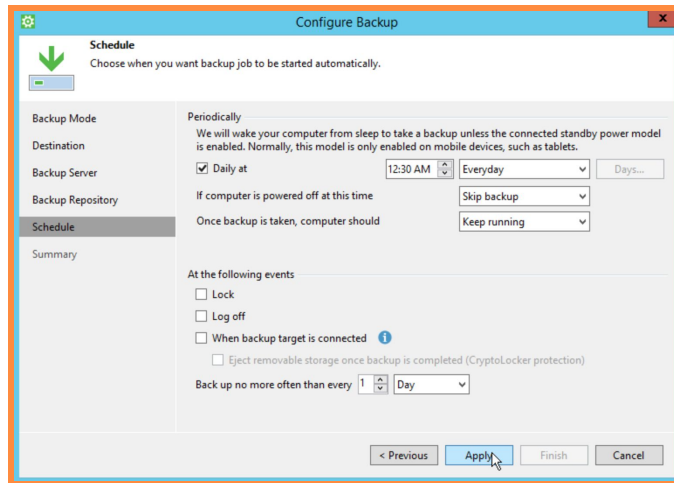
Backup repository:

219.4 GB free of 279.4 GB

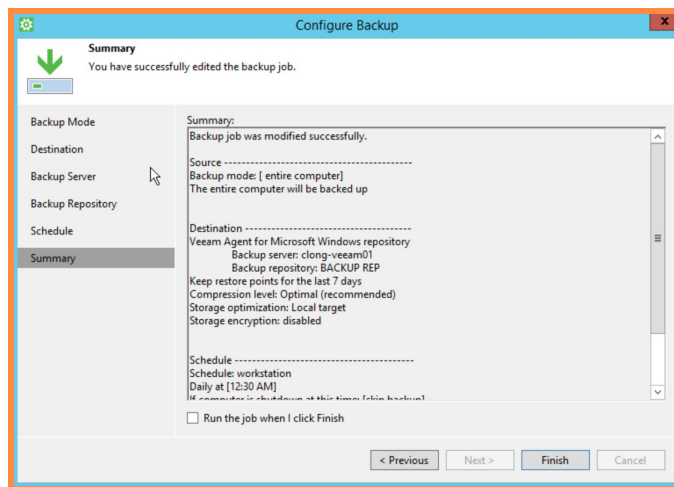
Keep backups for the past:  days when the computer was running

Click Advanced to enable periodic full backups, configure encryption and other backup file settings

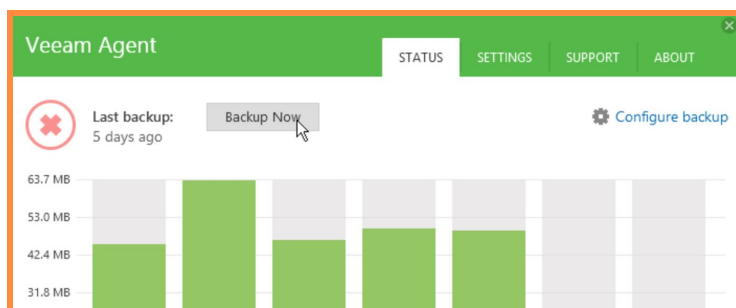
- Set your preferred backup options. Click Apply when you are finished.



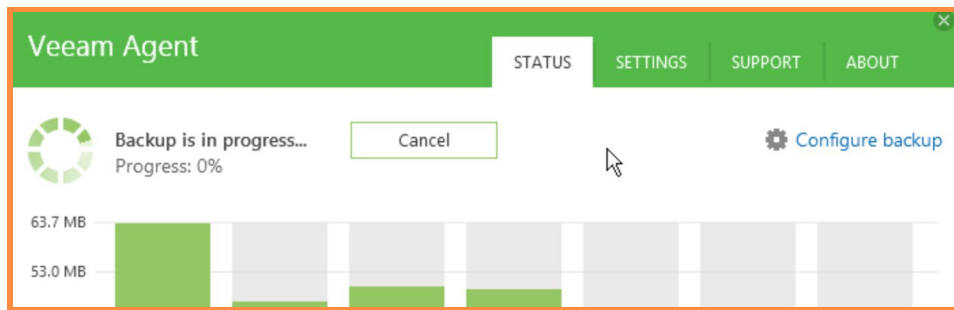
8. Review your selections and if everything is correct click Finish.



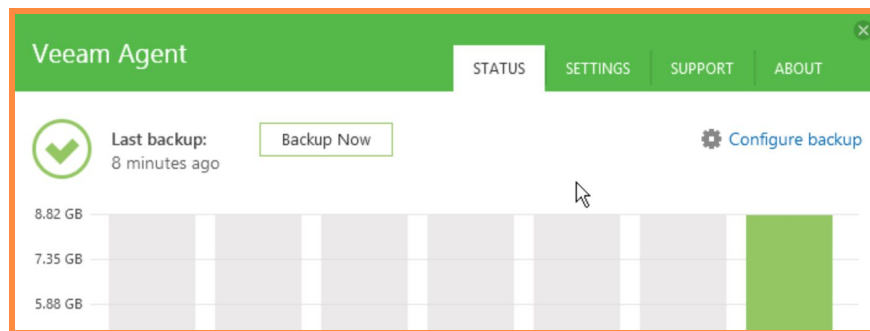
9. Click Backup Now.



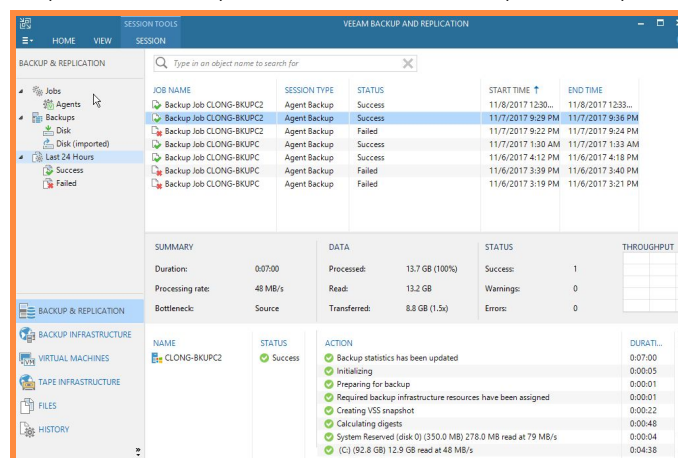
10. The backup will start. Progress is displayed in the upper left corner.



11. Once the backup is complete you will see a green check in place of the previous progress percentage.

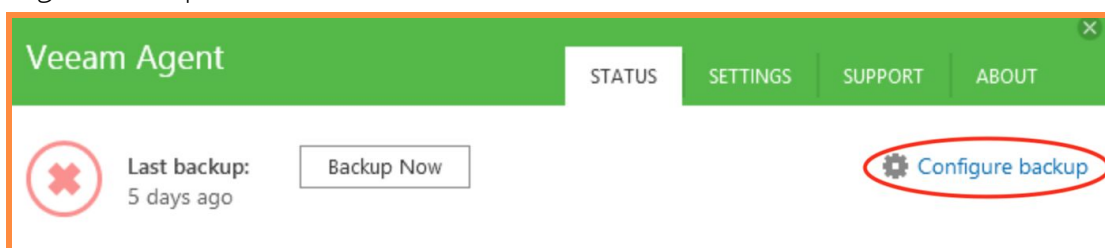


12. You can also view your completed backup in the Veeam Backup and Replication Console.

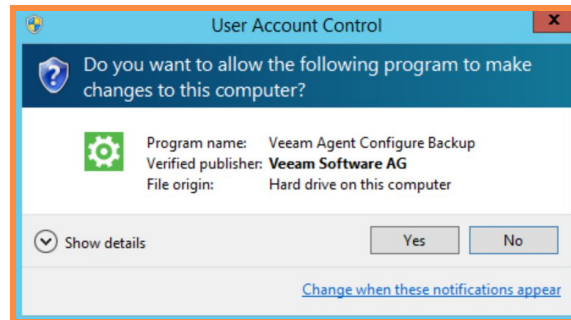


## FILE LEVEL BACKUP CONFIGURATION

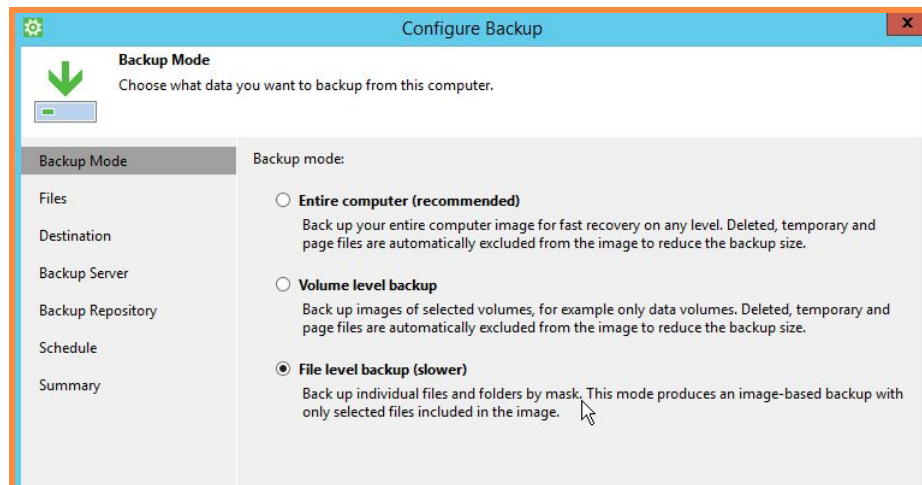
1. Click Configure Backup.



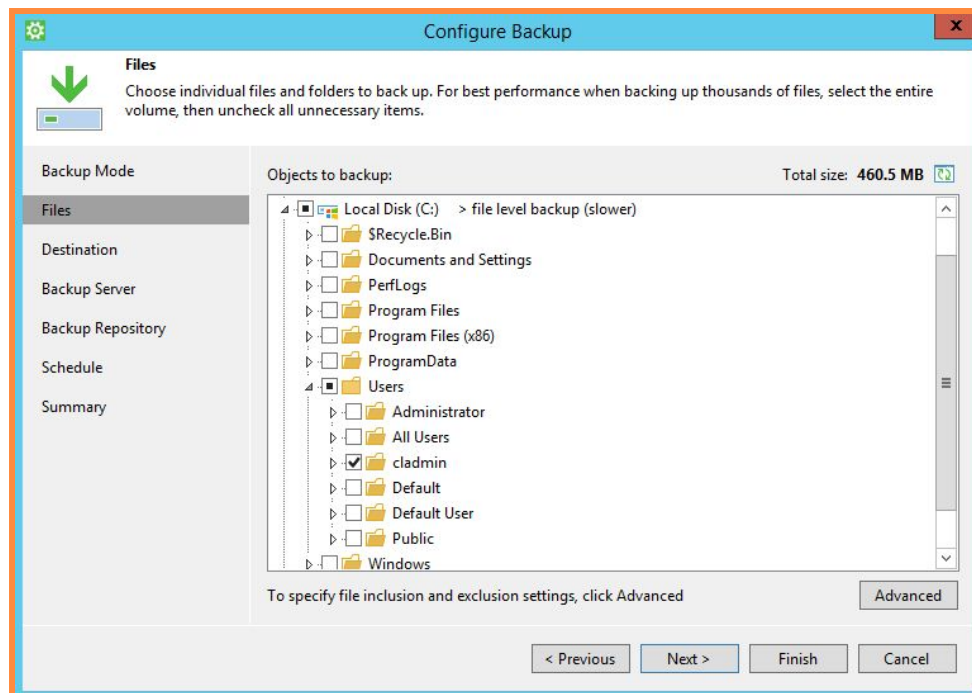
- Click Yes to allow Veeam to make changes.



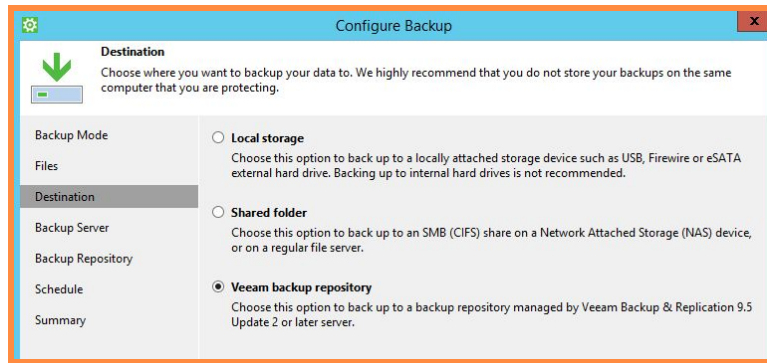
- Select File Level Backup and then click Next.



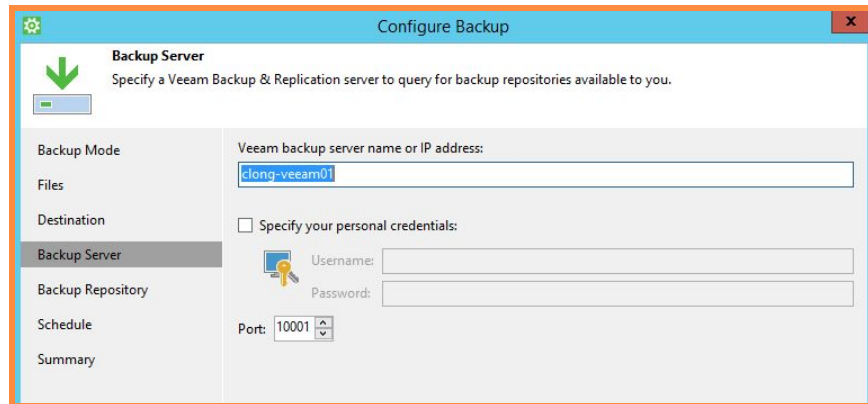
- Select the folder(s) and/or the file(s) that you would like to backup.



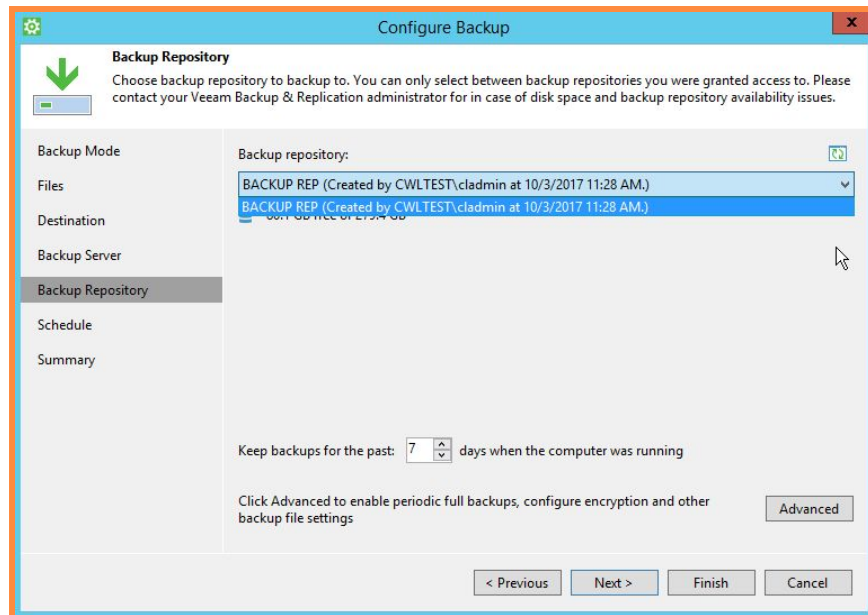
- Select to use an existing Veeam Backup Repository for the target location. Click Next.



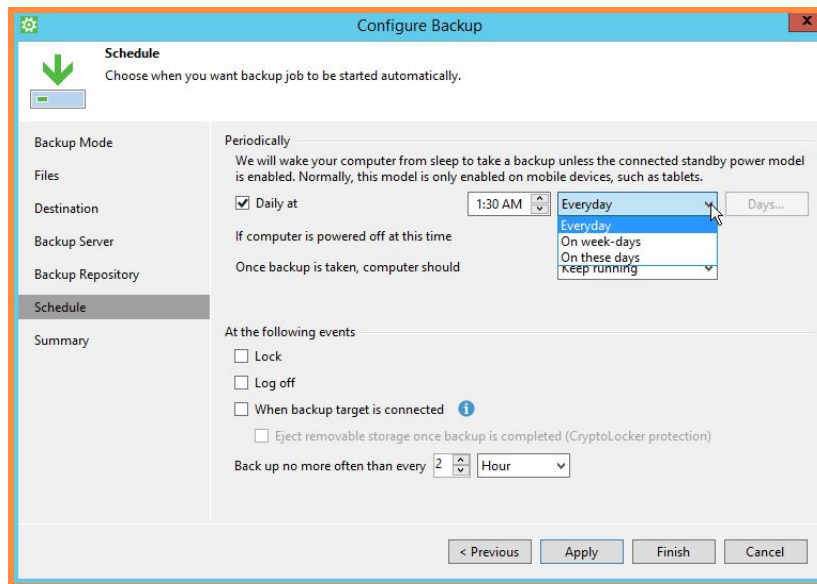
- Enter the name or IP address of your Veeam Backup Server.



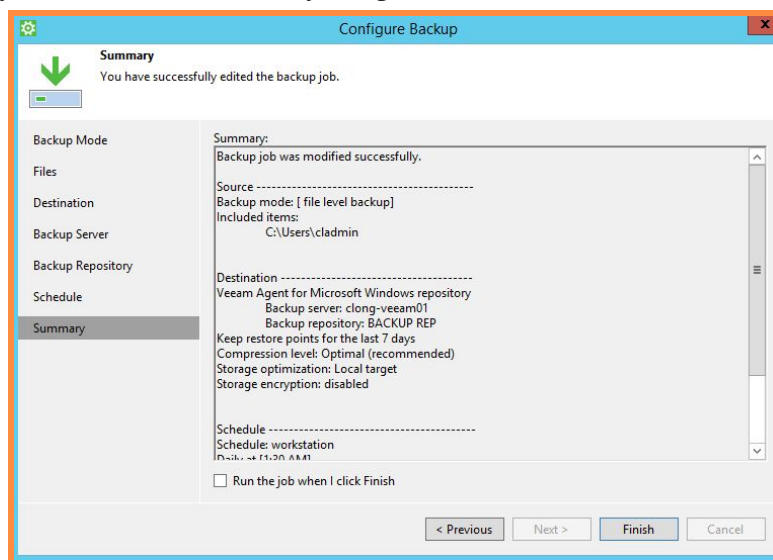
- Select the repository where you would like your data to be backed up to.



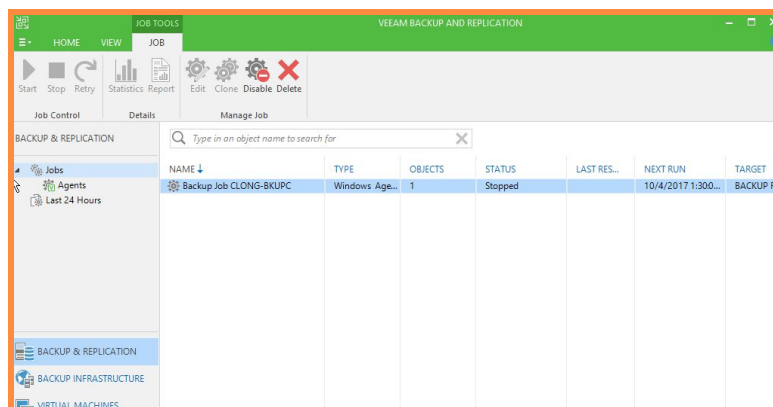
- Select the frequency and time for the backups to occur and what actions to take when the computer is powered off and what to do once the backup is complete.



9. Click next to review your selections. If everything looks correct, click Finish.



10. Once your job is configured, it will appear in the jobs window on your Veeam Backup and Replication Console.

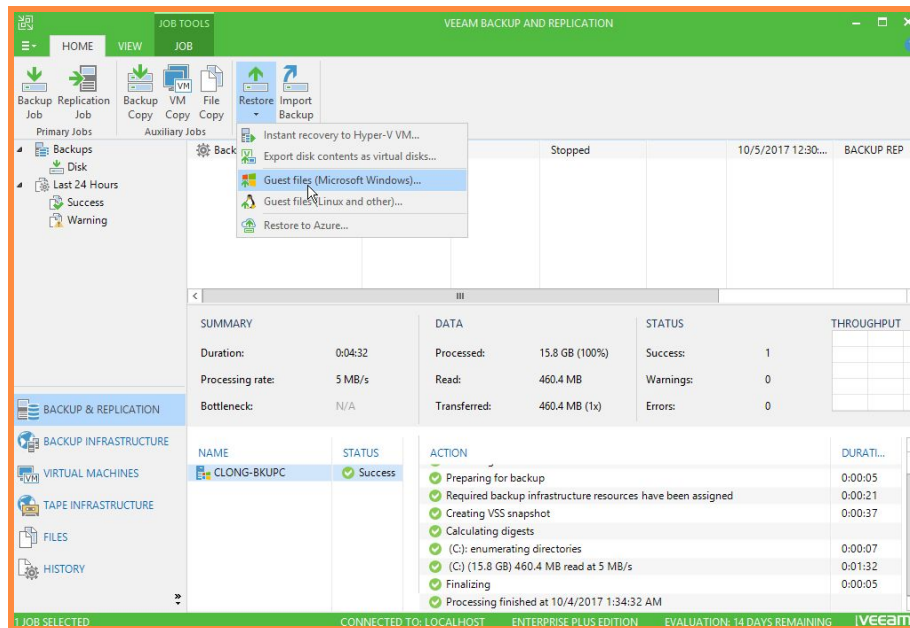


# RESTORE

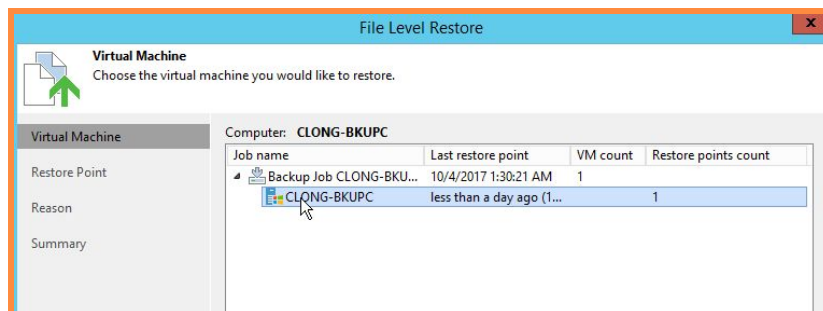
This document covers both file level and bare metal restoration and recovery using the Veeam Recovery Points and Veeam Recovery Media image created in previous sections.

## FILE LEVEL RESTORE

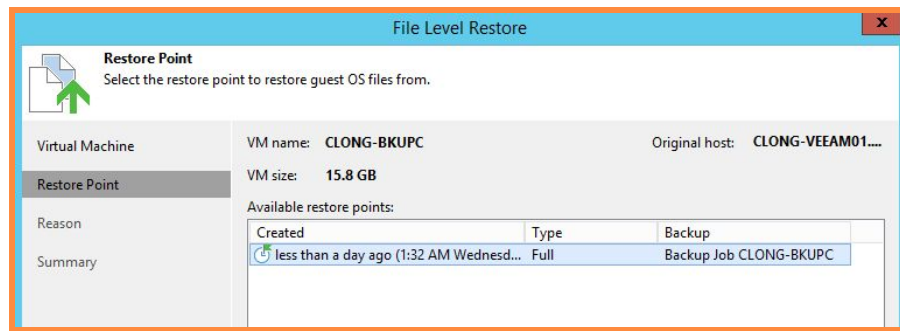
1. In the Veeam Backup and Replication Console click on the Home tab, select Restore, and then click on the type of guest VM you are wanting to restore files to.



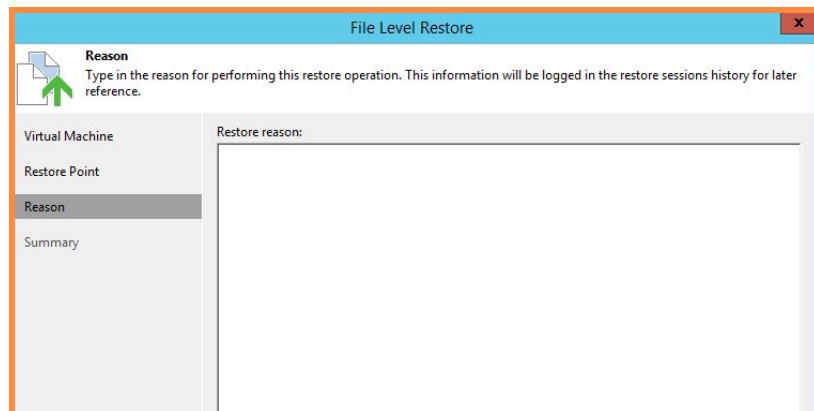
2. Select the appropriate backup date for the VM that you are wanting to restore and click Next.



3. Select the Veeam Restore Point where the version of the file(s) are located that you want to restore and click Next.



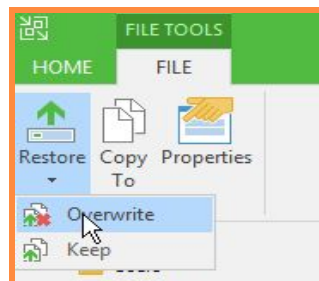
- Enter a reason for the purpose of the restore and click Next.



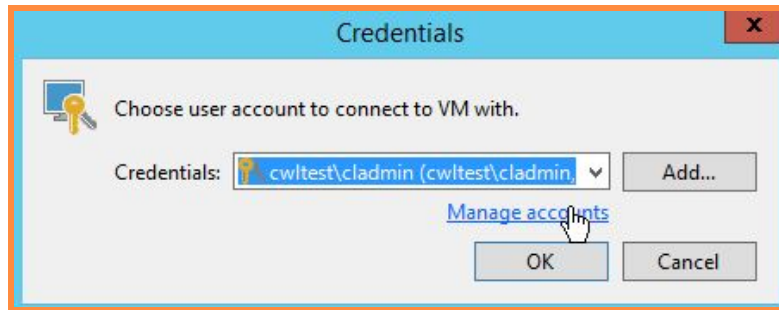
- View the summary of your restore for accuracy and click Finish to proceed.
- Navigate to the file(s) and/or folder that you would like to restore.



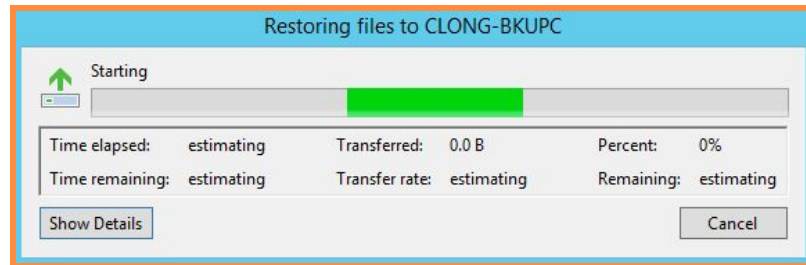
- Click the Restore button in the upper left-hand corner and choose Overwrite if you are going to restore a deleted or corrupted file. Chose Keep if you are restoring an older version of a file, but need to keep the existing version.



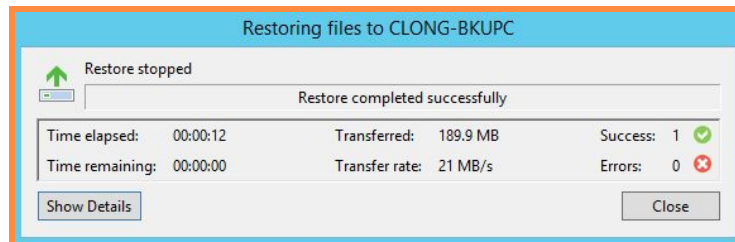
8. Select or Add the proper credentials required to complete the restore and click OK.



9. The restore process will begin.



10. When the restore completes you will be presented a summary of the job and be notified of any errors if they occurred.



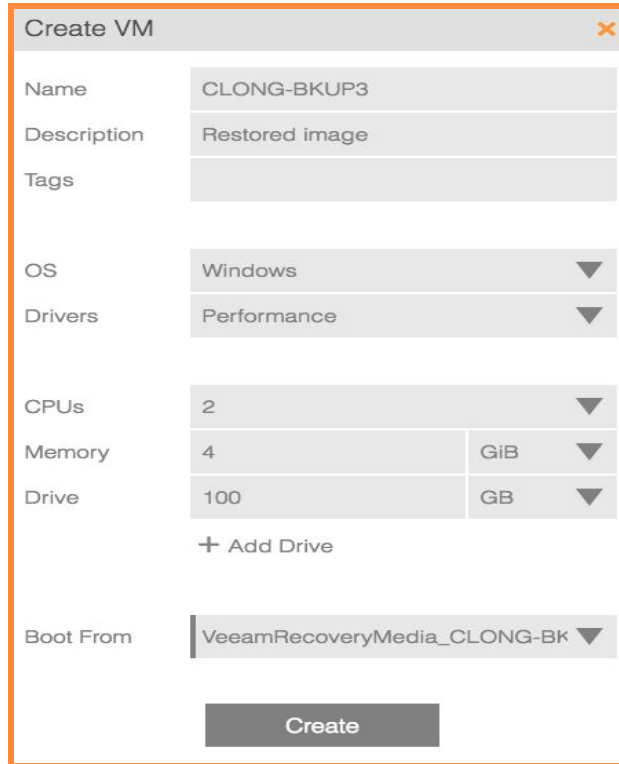
11. Verify that the restored items are accessible and accurate.

## BARE METAL RESTORE

Veeam offers the option to restore a full VM to your HC3 system environment. It is best practice to create the Veeam Recovery Media image for this process during the agent installation on the HC3 VM or by utilizing the Recovery Tool Wizard after agent installation to create a complete disaster recovery image of the HC3 VM.

1. Copy the Veeam Recovery Media ISO image to the media storage on your system. This is as easy as dragging the ISO file from your file explorer into the HC3 web interface tab in the web browser to automatically start the upload. Wait for the upload to finish before proceeding. Progress can be viewed in the Control Center Media tab.
2. When the ISO upload is complete click the + in the left-center of the HC3 web interface to create the new VM for the ISO recovery file. Give the VM a name and the same specifications that the old machine used—RAM and CPU—as well as the same number of drives. Drive sizes must be the same or larger (if desired).

3. In the Boot From dropdown list be sure to select the uploaded Veeam Recovery Media ISO image.



**Create VM**

Name: CLONG-BKUP3

Description: Restored image

Tags:

OS: Windows

Drivers: Performance

CPUs: 2

Memory: 4 GiB

Drive: 100 GB

+ Add Drive

Boot From: VeeamRecoveryMedia\_CLONG-BK

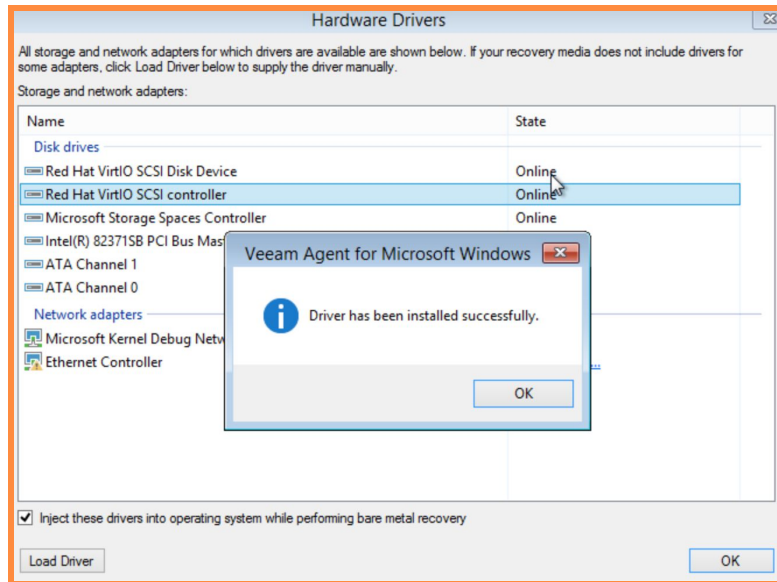
Create

4. Click Create.
5. When the machine boots up, you will see a screen similar to the one below.

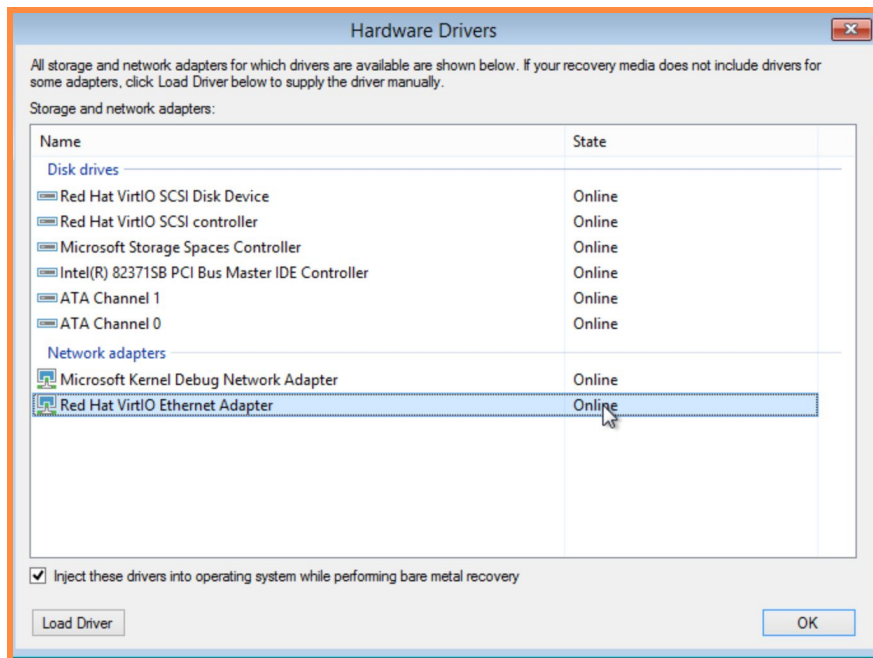


6. Click the network icon in the lower right corner. You will need to install a network driver before you continue. In the pop-up window, select Install driver... under State next to Red Hat VirtIO Ethernet Adapter.
7. There is also a driver installation option for SCSI Controller. Click the Install driver... option under State for this as well.

8. Click OK.

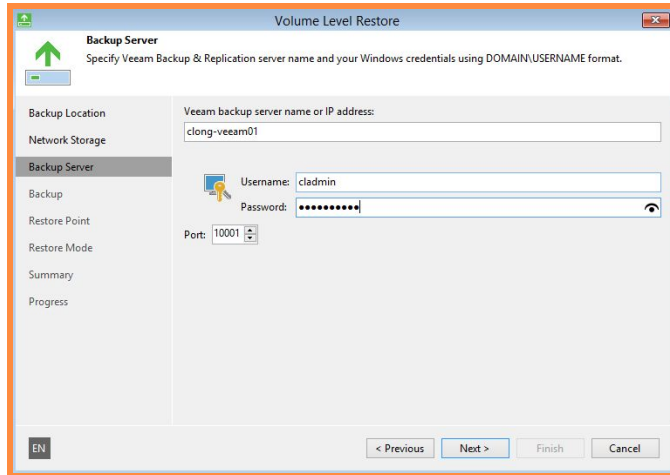


9. The drivers for both devices should be installed and online as shown below; click OK to proceed to the ISO recovery screen.

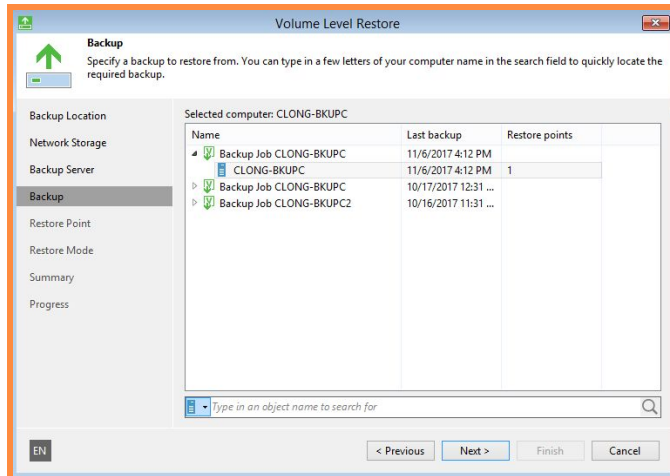


10. Choose Bare Metal recovery.

11. Enter the name of your Veeam Backup Server and enter the proper credentials.

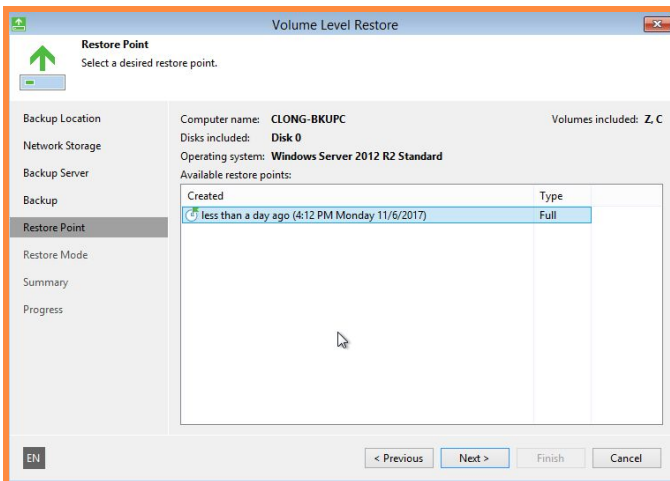


12. Select a backup of the machine from the Veeam Backup Repository and then click Next.



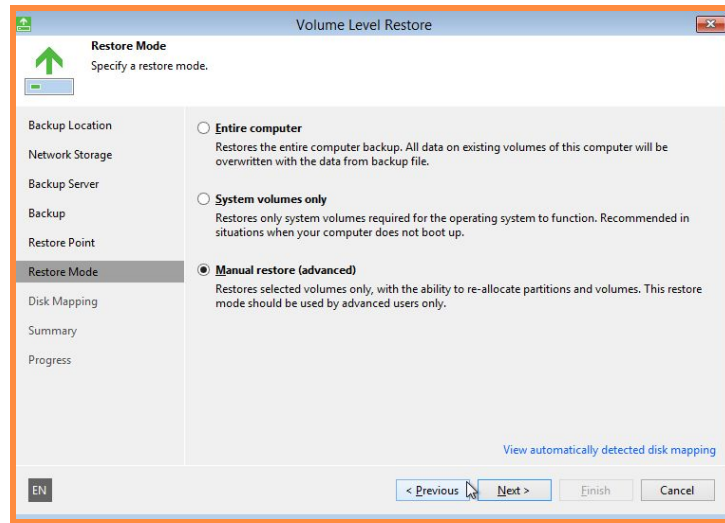
Name	Last backup	Restore points
Backup Job CLONG-BKUPC	11/6/2017 4:12 PM	
CLONG-BKUPC	11/6/2017 4:12 PM	1
Backup Job CLONG-BKUPC	10/17/2017 12:31 ...	
Backup Job CLONG-BKUPC2	10/16/2017 11:31 ...	

13. Select the most recent restore point and click Next.

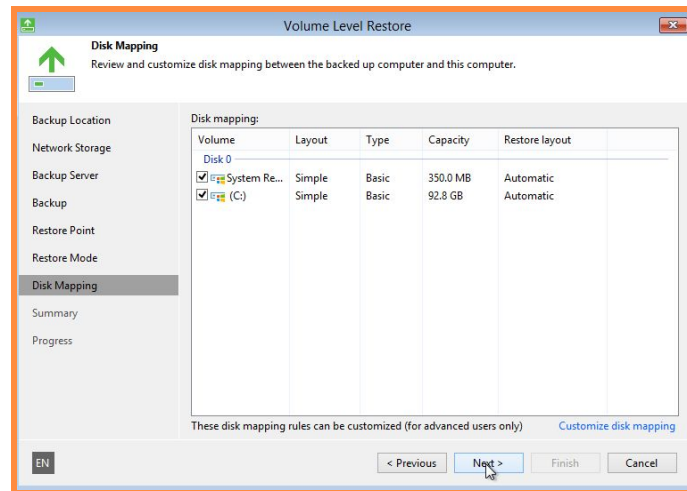


Created	Type
less than a day ago (4:12 PM Monday 11/6/2017)	Full

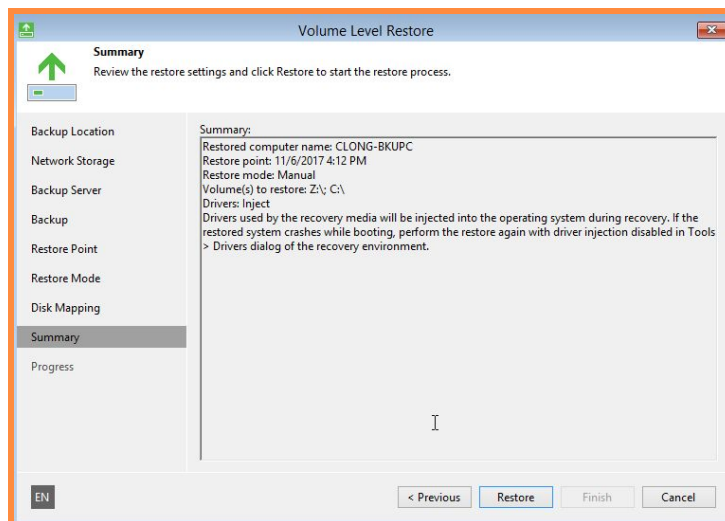
14. Select Manual Restore (Advanced) and click Next.



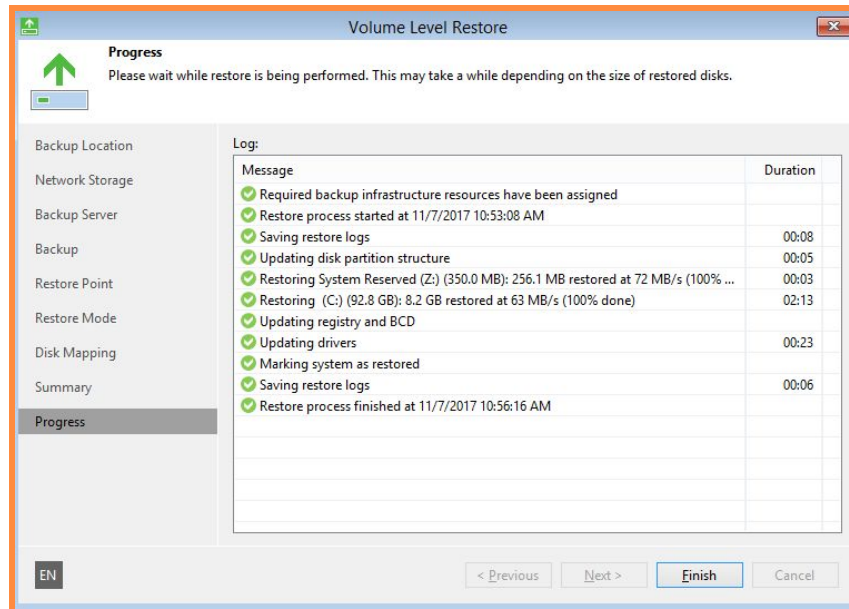
15. View the disk mappings and click Next.



16. Read the summary to verify your selections. If everything looks correct click Restore.



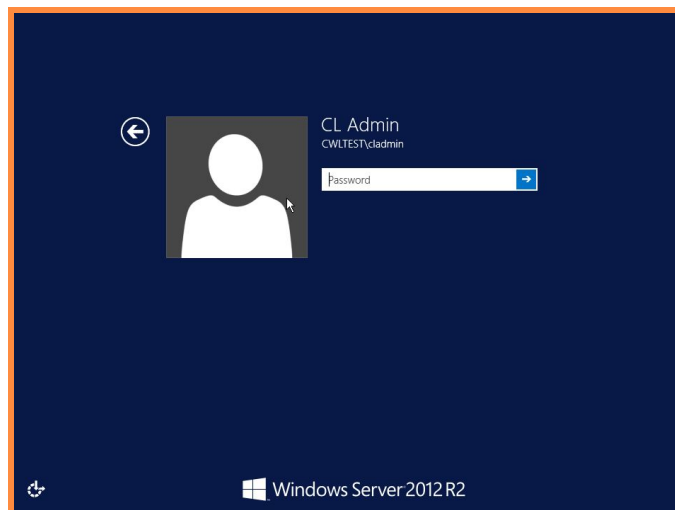
17. Once the process is complete click Finish.



18. You will be prompted to reboot the VM once the restore is complete. Click Yes.



19. After the reboot you will be presented with the login screen.



20. Enter your credentials and ensure the restoration was successful.

# FEEDBACK & SUPPORT

## DOCUMENT FEEDBACK

Scale Computing welcomes your suggestions for improving our documentation. Please send your feedback to [documentation@scalecomputing.com](mailto:documentation@scalecomputing.com).

## TECHNICAL SUPPORT AND RESOURCES

There are many technical support resources available for use. Access this document, and many others, at <http://www.scalecomputing.com/support/login/>.

- [Partner Portal - Partner and Distributor use only.](#)
- [User Community - Customer focused, including our online Forum.](#)

### Online Support

You can submit support cases and view account information online through the Scale Computing Customer and Partner Portals at <http://www.scalecomputing.com/support/login/>. You can also Live Chat with support through [www.scalecomputing.com](http://www.scalecomputing.com) during standard hours Monday-Friday from 8-8 local time.

### Telephone Support

Support is available for critical issues 24/7 by phone at +1 877-SCALE-59 (+1 877-722-5359) in the US and at +44 (0) 808 234 0699 in Europe. Telephone support is recommended for the fastest response on priority issues, and the only response after standard Support hours.